

## CLAIMS:

1. A game playing device (10) for receiving input data by scanning graphical information (160), the device (10) comprising:

- (a) scanning means (50) for transducing said input data from said graphical information (160);
- 5 (b) computing means (30) coupled to the scanning means (50) for receiving therefrom said input data comprising one or more of input parameters, software and solution parameters for controlling software execution within the computing means (30);
- (c) displaying means (40) coupled to the computing means (30) for presenting graphical output information from the computing means (30) to one or more users of the device
- 10 (10);
- (d) user interfacing means (60) coupled to the computing means (30) for receiving user input information and conveying said information to the computing means (30) for controlling operation of the computing means (30),

wherein the computing means (30) is operable to execute at least one of

15 software pre-loaded thereinto or software subsequently loaded thereinto to drive the displaying means (40), said software functioning in response to input information and/or parameters input to the computing means (30) from at least one of the scanning means (50) and the user interfacing means (60).

20 2. A device according to Claim 1, further including network interfacing means (80) for communicating with at least one of other game playing devices (100, 105) compatible with the device (10) and the Internet.

3. A device according to Claim 1, wherein the displaying means (40) includes at

25 least one of: one or more light emitting diodes (LEDs), one or more incandescent filament lamps, one or more liquid crystal displays (LCDs) and an interface for presenting information onto a television-type apparatus.

4. A device according to Claim 1, wherein the interfacing means (60) includes one or more of the following for entering data from one or more users to the computing means (30): one or more membrane switches, silicone conductive-material switches, conventional push-button switches, conductive pad switches, capacitance controlled switches, one or more stylus-type transducer.

5. A device according to Claim 4, wherein the interfacing means (60) is susceptible to receiving information from television-type remote controls.

6. A device according to Claim 2, wherein the network interfacing means (80) is arranged to support wireless communication, for example proprietary Blue-Tooth and/or mobile telephony.

7. A device according to Claim 1, wherein the scanning means (50) includes at least one of: a 1-dimensional array of photodetectors, a 2-dimensional array of photodetectors, an optically-sensitive charge-coupled-device (CCD), an complementary metal oxide semiconductor (CMOS) imaging device, a magnetic scanning device and an imaging scanning device.

8. A device according to Claim 7, wherein the scanning means (50) further comprises synchronization marker sensing means for assisting the scanning means to temporally synchronize to moving visual data presented thereto.

9. A device according to Claim 7, wherein the scanning means (30) is capable of reading and conveying visual and/or magnetic information presented thereto to the computing means (30), said information comprising at least one of:

- (a) executable software;
- (b) software operating parameters including at least one of: game configuration data, game difficulty parameters, game speed parameters, game character parameters, game layout parameters, device configuration data;
- (c) one or more of: answers and solutions to one or more pre-programmed games and software games input to the device (10) via its scanning means (30), and
- (d) one or more Internet URLs.

10. A method of operating a game playing device (10) for receiving input data by scanning graphical information (160), the device (10) comprising:

- (a) scanning means (50) for transducing said input data from said graphical information (160);
- 5 (b) computing means (30) coupled to the scanning means (50) for receiving therefrom said input data comprising one or more of input parameters, software and solution parameters for controlling software execution within the computing means (30);
- (c) displaying means (40) coupled to the computing means (30) for presenting graphical output information from the computing means (30) to one or more users of the device
- 10 (d) user interfacing means (60) coupled to the computing means (30) for receiving user input information and conveying said information to the computing means (30) for controlling operation of the computing means (30),

the method including the steps of:

- 15 (e) executing at least one of software pre-loaded or software subsequently loaded into the computing means (30); and
- (f) arranging for the computing means (30) to drive the displaying means (40), said software functioning in response to input information and/or parameters input to the computing means (30) from at least one of the scanning means (50) and the user
- 20 interfacing means (60).

11. A method according to Claim 10, including the step of arranging for the device (10) to interface with one or more of other game playing devices and the Internet connected thereto so as to provide for interactive game playing between a plurality of users.

12. A method according to Claim 10, including the step of arranging for the scanning means (30) to be capable of reading and conveying visual and/or magnetic information presented thereto to the computing means (30), said information comprising at least one of:

- 30 (a) executable software;
- (b) software operating parameters including at least one of: game configuration data, game difficulty parameters, game speed parameters, game character parameters, game layout parameters, device configuration data; and

- (c) one or more of: answers and solutions to one or more pre-programmed games and software games input to the device (10) via its scanning means (30).